

WASHINGTON STATE ROAD USAGE CHARGE

Update to the Washington State Transportation Commission





Jeff Doyle, Project Manager D'Artagnan Consulting December 11, 2018 Olympia, Washington

WA RUC PROJECT RECAP AND PATH FORWARD

- Retracing the developmental steps and decisions, 2012 - present
- Pathway forward for WA RUC project

ROLES IN DELIVERING THE PROJECT AND FINAL REPORT

WA RUC Steering Committee MEASURES...

- Oversee all research to ensure it is thorough and accurate
- Identify issues of importance or concern for indepth research ("parking lot")
- Design a RUC demonstration to test operational approaches and measure public acceptance
- Present information and options fairly to reflect the full range of viewpoints
- Provide guidance on technical and operational issues

Transportation Commission **RECOMMENDS**...

- Receive the Final Report from the Steering Committee
- Decide whether to make recommendations on issues

Legislature **DECIDES**...

- Receive the Final Report and Recommendations from WSTC
- Decide whether (or how) to implement a RUC



PREPARING FOR THE END OF THE LIVE TEST DRIVE

- Operations activities
- Communications activities

Matthew Dorfman, D'Artagnan Consulting Ara Swanson, Envirolssues



OPERATIONS SCHEDULE: DATES IMPACTING PARTICIPANTS

Given that **January 2019** is the last month for data recording:

- Email announcing closeout procedure to all participants: December-January
 - Details ahead in Communications section
- Final Mileage Data Reporting: Late January
 - Odometer-based methods and MileMapper: Final Reporting Reminders on Jan 20, 25, and 30
 - Plug-in Device: All miles included through January 31
 - VLO: Appointments encouraged in the Jan 20-31 timeframe
- Target Final invoice delivery: February 5-7
- Payments Demo participants should make final payments
- Final Interoperability Reconciliation: ~March 2019



CLOSING OUT THE PILOT: NOTIFICATIONS



Email announcement to project interest list (with multiple reminders in advance) and updated website



Distribute press release and make follow-up calls to some media contacts who have followed pilot closely



Help desk staff and project spokespeople will be ready to answer incoming questions



PILOT EVALUATION **ACTIVITIES**

- High-level results from Participant Survey #2 (mid-pilot)
 Participant Focus Group sessions

Allegra Calder BERK Consulting



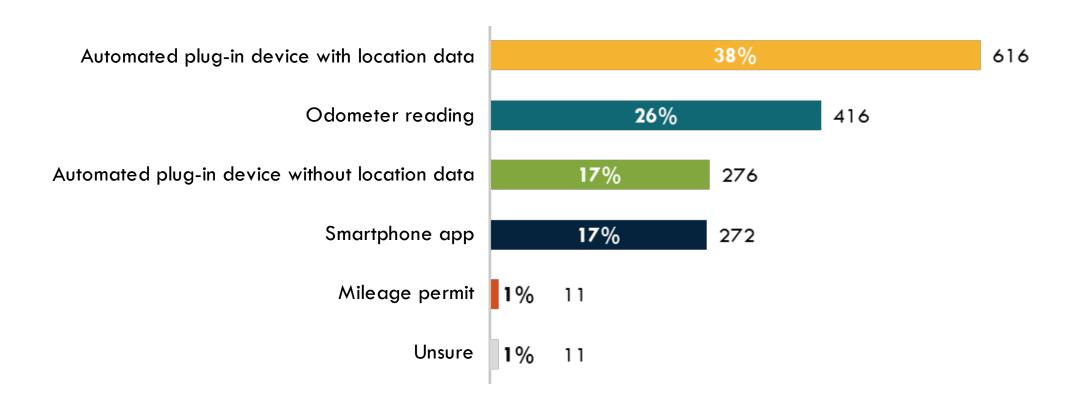
PARTICIPANT SURVEY # 2

On September 24, participants were emailed Survey #2, which remained open until October 8.

- 2,052 participants received the second survey
- 1,547 completed it (75% response rate)

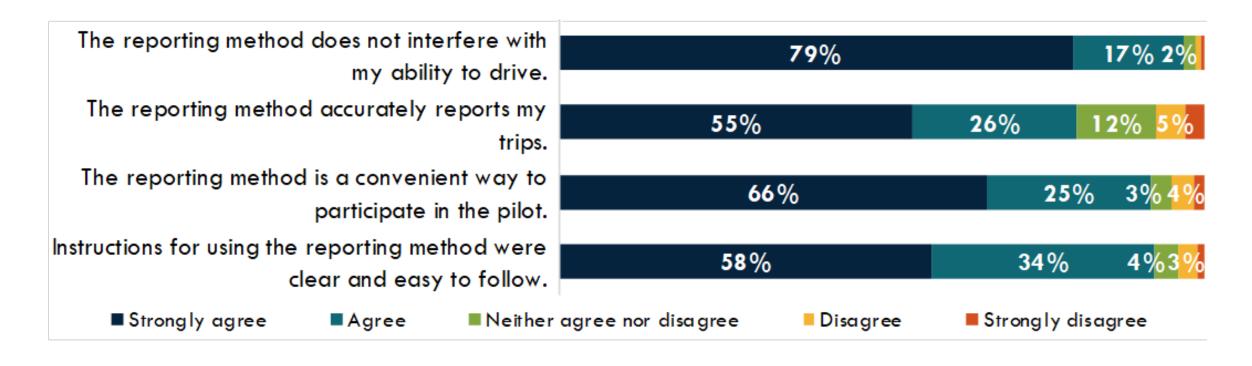


Which mileage reporting method are you currently testing in the pilot? (n=1,602)



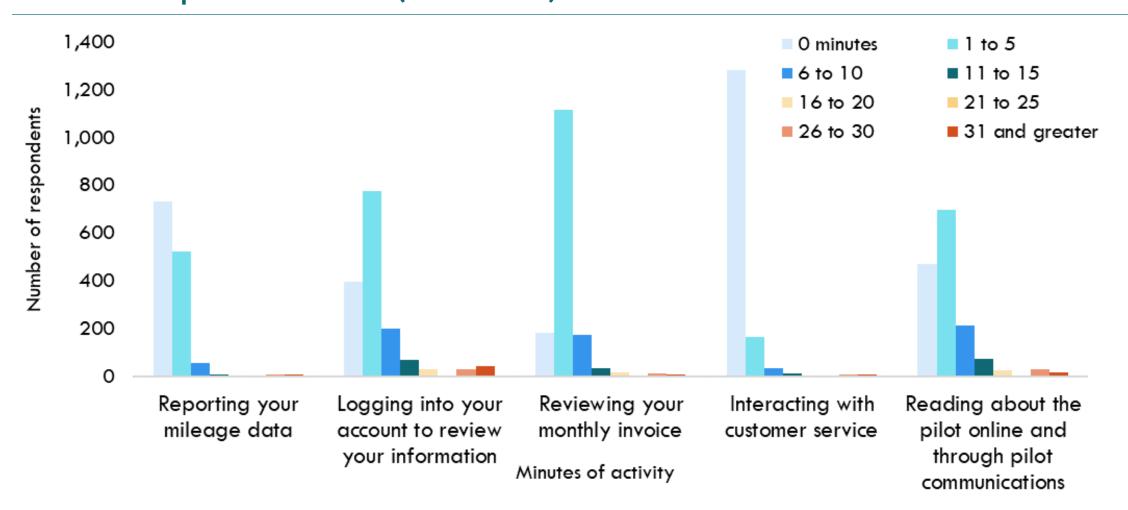


Please indicate your level of agreement with the following statements about your current reporting method: (n=1602)





How much time do you spend on each of the following pilot activities per month? (n=1,590)





Please rate the following pilot activities in terms of ease of completion. (n=1,602)



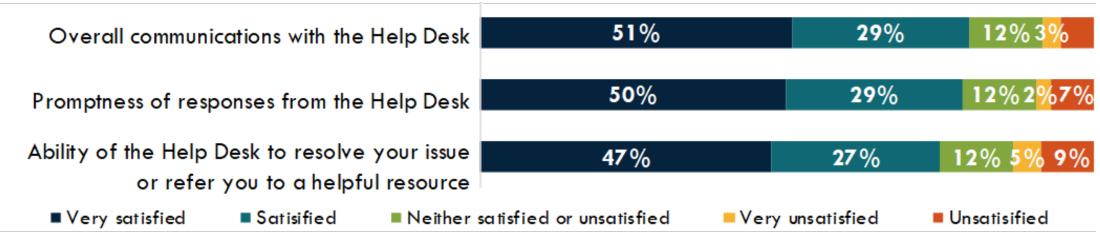


OUR COMMUNICATIONS WITH YOU

Have you contacted the WA RUC Help Desk (1-833-WASH-RUC or info@waroadusagecharge.org)?



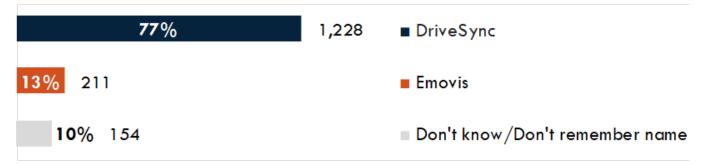
Please indicate your level of satisfaction for each of the following: (n=476)



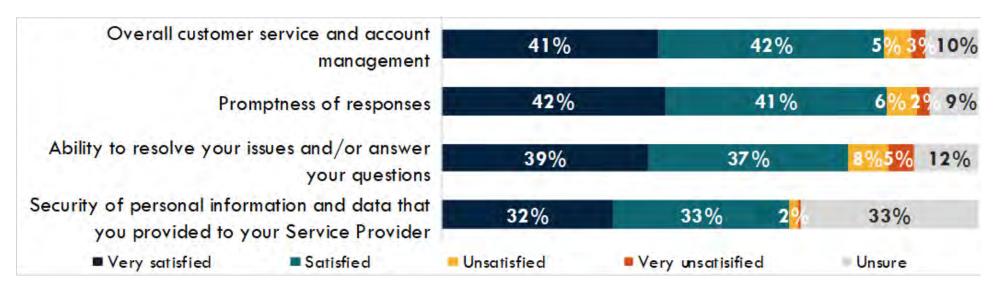


YOUR RUC SERVICE PROVIDER

Who is your RUC Service Provider? (n=1,593)

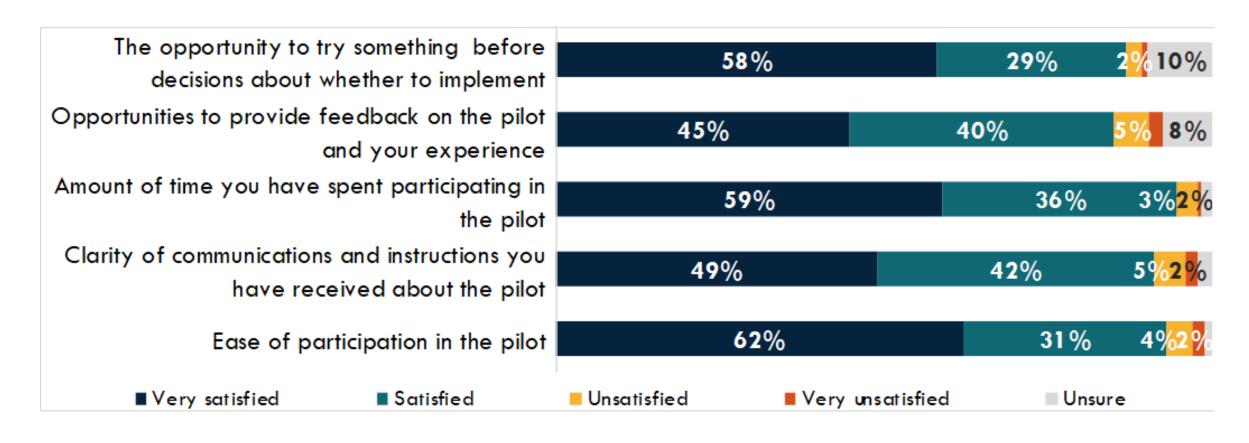


Please indicate your level of satisfaction with your Provider for each of the following: (n=1,593)



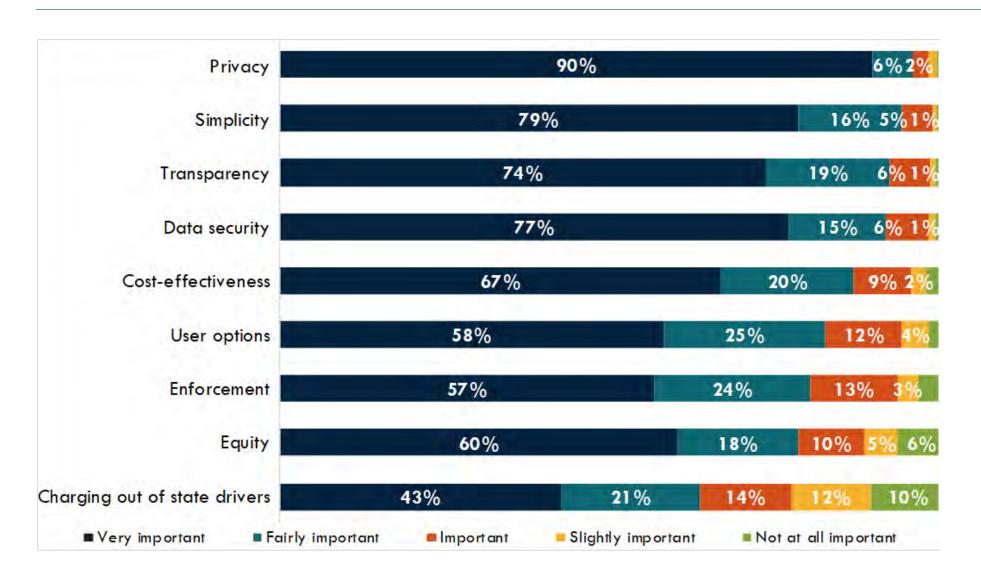


Thinking about your experience with the RUC pilot so far, how satisfied are you with each of the following? (n=1,576)



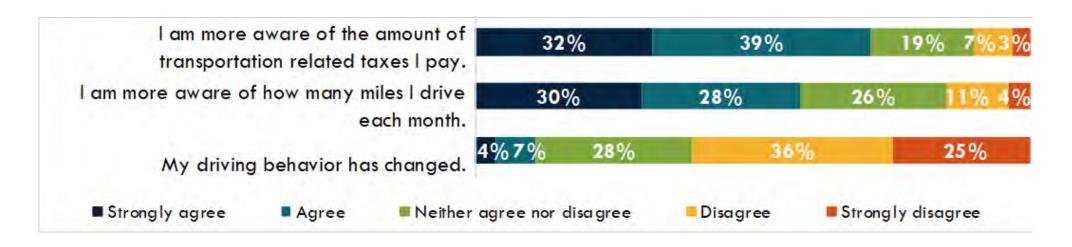


How important to you are the following principles for a potential road usage charge system? (n=1,575)





Based on your participation to date in the pilot, please indicate your level of agreement: (n=1,576)

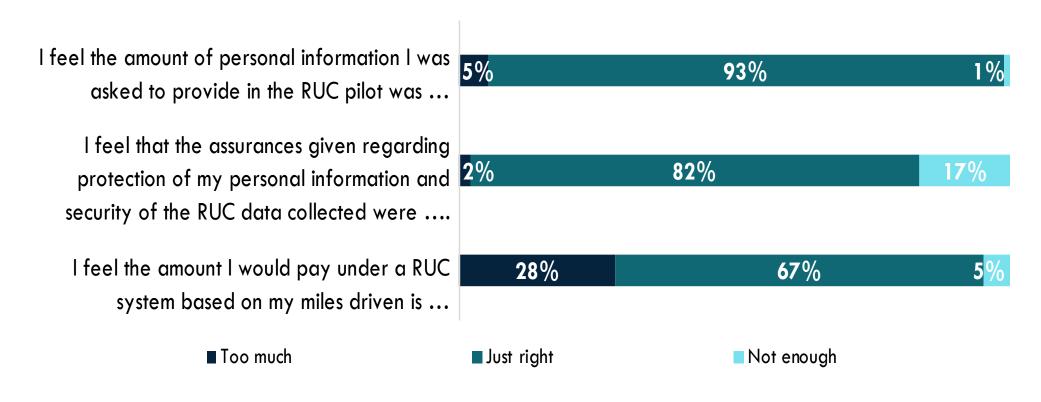


Changes in driving behavior include:

- Safer driving/more aware: 71
- Reduced number of trips: 52
- More awareness of driving habits and associated costs: 17

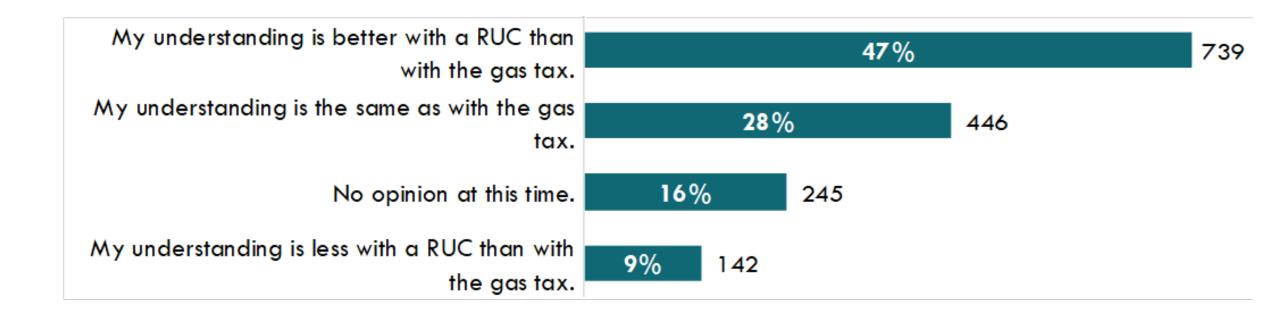


Based on your participation in the RUC pilot, how do you feel about each of these areas? (n=1,576)



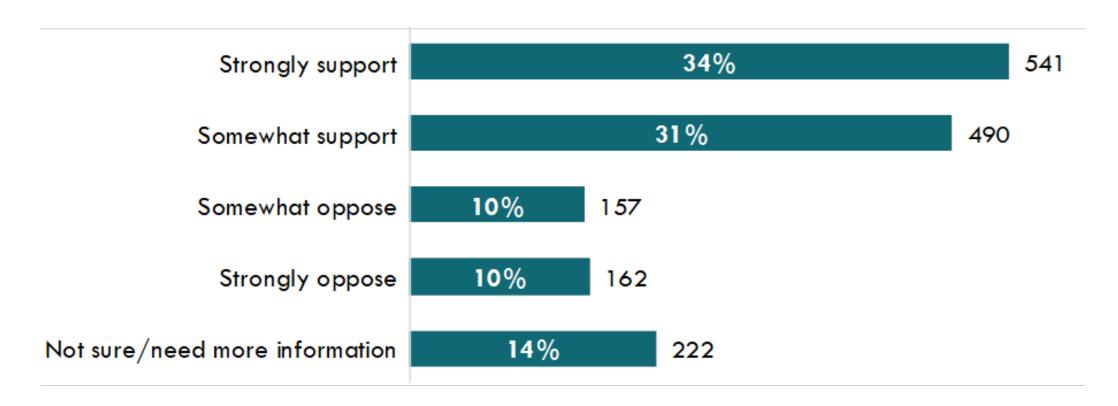


Based on your invoices, how do you feel about your ability to understand what you pay in transportation tax? (n=1,572)



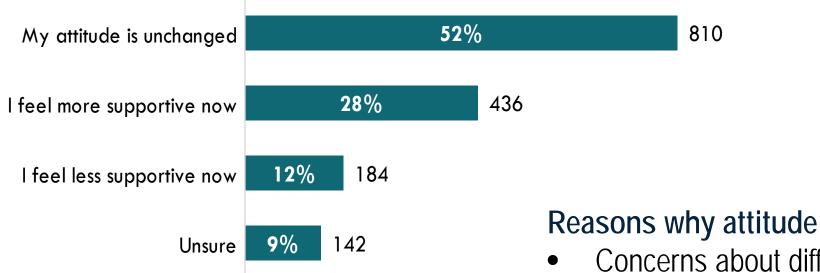


At this point, how do you feel about implementing a RUC as a replacement to the gas tax to fund transportation infrastructure? (n=1,572)





Since the beginning of the pilot, has your attitude towards a road usage charge system changed? (n=1,572)



Reasons why attitude has changed:

- Concerns about difficulty and statewide implementation 38
- Not confident in miles accuracy 20
- See importance of revenue for road 19
- Will pay more 16



Please share any other comments you have: (n=368)

- Accuracy concerns (33% of comments). Typically mentioned a belief that their mileage was tracked
 incorrectly and they would be over-charged. Concerns also included a belief that the system could be exploited
 by people who would pay less than they should pay under the system.
- Complexity/implementation (33% of comments). Focused on a RUC being more difficult to understand than the gas tax, or that the system would be administratively challenging to implement and may be too costly or unsuccessful when expanded to include the entire state.
- Vehicle equity issues (15% of comments). Included concern that the RUC doesn't consider vehicle size and/or damage caused to roads by some vehicles.
- Equity issues (13% of comments). Issues of rural drivers needing to drive more as part of their daily life, a lack of adequate public transportation to enable some drivers to drive less, or concern about the inability of some people to pay higher taxes.



MID-PILOT PARTICIPANT FOCUS GROUP SESSION

Allegra Calder BERK Consulting



FOCUS GROUP OVERVIEW

Purpose

- Understand perceptions on topics such as:
 - Ease of participation and compliance
 - RUC equity relative to gas taxes
 - Privacy protection and data security
- Provide depth and understanding into the "what, how, and why" of participant perceptions.



FOCUS GROUP DISCUSSION QUESTIONS

- Mix of individual written exercises and group discussion.
- Discussion Topics:
 - General impressions of the road usage charge before vs. now
 - Understanding of transportation funding in WA state
 - Road usage charge pros, cons, and priorities
 - Driving behavior changes
 - Support and preferences for gas tax vs. road usage charge

METHODOLOGY: RECRUITMENT

Recruitment Objectives

- Balance of location (Eastern and Western Washington)
- Gain perspective on a thematic topic or represent a specific characteristic:
 - Non-white
 - Moderate or Low-income
 - Rural
 - High mileage
 - Electric/Hybrid Vehicles
- Diverse range of demographics, perspective, and driving behavior

METHODOLOGY: LOCATIONS AND THEMES

Six focus groups held in September and October 2018.

Federal Way 1: rural, high mileage

Federal Way 2: hybrid/electric vehicles

Federal Way 3: low/moderate income

Vancouver: general mix

Spokane: general mix

Yakima: rural, high mileage





METHODOLOGY: PARTICIPANT CHARACTERISTICS

51 focus group participants

- Moderate or low income (6 participants had household incomes of \$30,000 or less)
- Rural (13 participants characterized where they live as being a rural setting)
- **High mileage drivers** (15 participants drive more than 15,000 miles annually)
- Hybrid and electric vehicle drivers (16 participants own or enrolled a hybrid or electric vehicle in the study)
- RUC perceptions (6 participants oppose or strongly oppose a RUC, 14 are neutral, 6 need more information, and 23 support or strongly support)



FINDINGS AND OBSERVATIONS



PARTICIPANT CHARACTERISTICS

Top Recording Methods

- Plugin device with GPS: Simple, don't have to think about it. More accurate information collected added benefits such as driving scores and car location if car is stolen.
- Plugin device without GPS: Simple, don't have to think about it. Participants like the inability to share location information.
- Phone app: "My phone is always with me anyway."
- Taking photos: Ability to control data and privacy, low-tech, but cumbersome remembering to take pictures every month.

Top Reasons for Joining Pilot Study

- Interest in knowing how much a RUC would cost them personally and whether it would more than a gas tax.
- Civic interest in this topic. Interest in transportation policy, equity, funding of infrastructure.

THEMES ACROSS ALL FOCUS GROUPS

- Most participants are accepting of the RUC and think it can work.
- Overall, most participants are having a good experience in the pilot.
- Some concern and questions about how the system will work at a statewide scale, frequently related to implementation and administration.

THEMES ACROSS ALL FOCUS GROUPS (continued)

- Many participants felt the RUC amount was not too much to pay and relatively comparable to the gas tax.
- In general, most participants say they still have little understanding of how transportation funding works.
- Top values: a system is that is simple, convenient, and does not take a lot of time or effort on behalf of the user.

TOP CONCERNS AND QUESTIONS

- Privacy and data collection
- Compliance and administration costs
- Fairness and equity
- Education and communication
- Long-term sustainability
- Environmental incentives
- Fairness in fund allocation



TOP CONCERNS AND QUESTIONS

Privacy Concerns

Reasons for Concern

- Want ability to say no to sharing data
- Don't want to share data with car insurance companies and law enforcement
- Worried about public disclosure laws

Reasons Not Concerned

- Give data away currently with smartphones, other apps, programs and companies.
- Appreciated the added benefits that the third party provided (e.g. scores for driving behavior).



TOP CONCERNS AND QUESTIONS

Fairness and Equity

Gas vs. hybrid or electric vehicles

"I would not pay the expense to get a more fuel-efficient vehicle because I would be saving less."

Income

"For low income people, I must move further and further away to afford a place to live"

What impacts roads the most?

Vehicle weight
Studded tires

DRIVING BEHAVIOR CHANGES

Most participants did not change their driving behavior.

Potential driving behavior changes mentioned among low/moderate income participants:

- Took less trips, driving less.
- Started looking for a job near my house, became more conscious. (participant in low income group).
- No change in driving behavior.
- The plugin device scoring helps change driving behavior, more aware of driving behavior.
- Take the shorter route on Google maps (even if it's slower).

WHAT DOES SUCCESS LOOK LIKE?

Success would have tangible and visible outcomes.

- Roads and bridges are well-maintained and safe
- Improvements to transportation system
- Sufficient revenue is generated

ADVICE TO STATE LEADERS

Support for RUC

The State should pursue this option, with caveats:

- Offer different recording methods
- Focus on equity (collection and distribution)
- Ensure data security

Stick with Gas Tax

- RUC won't work statewide and is regressive
- Gas tax is simple and familiar

Neither

- Explore hybrids of a RUC and gas tax
- Explore other options

Neutral Opinions and Additional Advice

- Educate the public
- Aim for simplicity
- Focus on outcomes and purpose
- Data security

POLICY DEVELOPMENT PROCESS

- Overview of policy development process
- Tracing back to the "parking lot"
- Committee member discussion about the process/outputs

TIMING: ISSUES ARE ADDRESSED WHEN SUFFICIENT DATA EXISTS

Before the pilot:

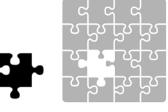
- How to operationalize the RUC mileage reporting approaches
- Whether and how to charge out-of-state drivers
- Exemption from RUC charges
- Refunds of RUC charges

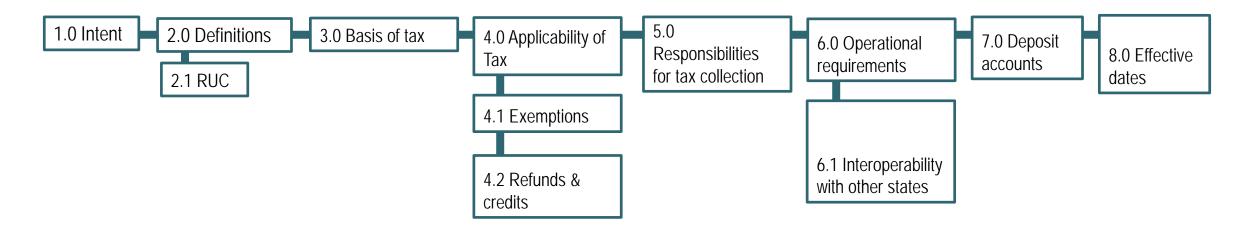
Anytime:

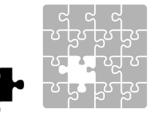
- RUC compatibility with tolls
- Commerce Clause impacts on RUC
- 18th Amendment impacts on RUC
- Per-mile rate setting
- Motor fuel tax bond requirements
- Permanent exemptions from RUC
- Use or dedication of RUC revenue
- Rate-setting basis for time-based permit
- Interoperability of RUC with other states

After the pilot:

- Whether and how best to use private sector service providers
- Drivers' reaction to the proposed RUC system
- Public understanding and acceptance of a RUC system
- State IT needs to support RUC
- Institutional roles in implementing a RUC system
- Transition strategy: which vehicles would pay RUC, and when









Does the legislature intend RUC revenues to be used exclusively for highway purposes?

- 18th Amendment effects on RUC
- Uses of revenues from RUC

Does the legislature intend that RUC eventually replace the gas tax over a period of time?

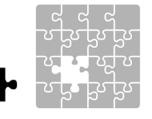
Transition strategy

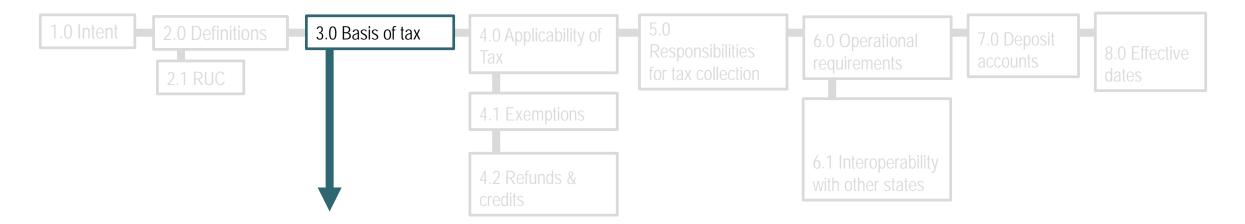




Is RUC defined as a vehicle registration fee?

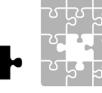
- 18th Amendment effects on RUC
- Uses of revenues from RUC
- RUC could be bonded at lowest cost of borrowing

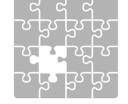




Will the tax be assessed for each exact mile driven, or applied to mileage "brackets"?

- Driver reaction to the proposed RUC system
- Rate-setting in a RUC system
- Rate-setting basis for time-base permit

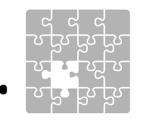


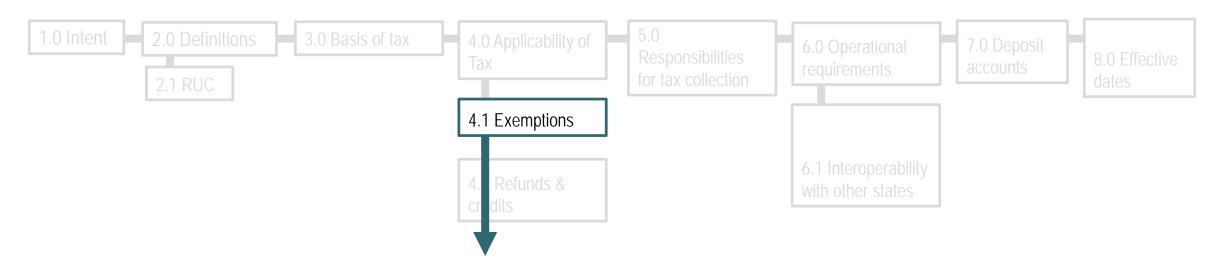




Who will be required to pay RUC?

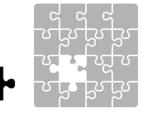
- Vehicles subject to RUC
- Transition strategy
- Out-of-state drivers
- Interstate Commerce Clause considerations





Who will be exempt from RUC?

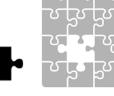
- Permanent exemptions from RUC
- Out-of-state drivers
- Transition strategy



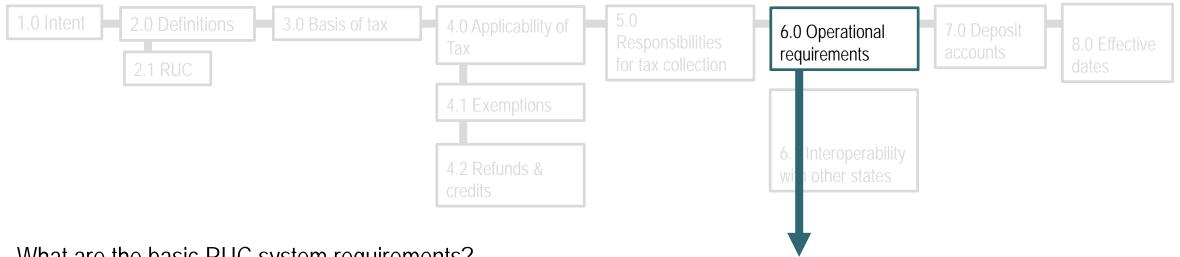


How would a RUC system be administered?

- Institutional roles in implementing any future RUC system
- State information technology needs
- Use of private sector account managers







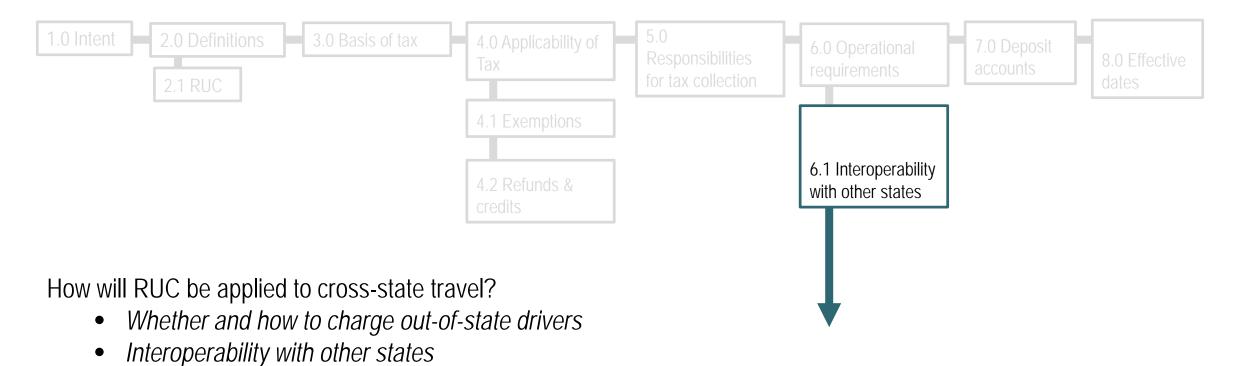
What are the basic RUC system requirements?

- How to operationalize the RUC mileage reporting approaches
- Model privacy policy for RUC in Washington
- State IT needs
- RUC compatibility with GoodToGo toll system

Interstate Commerce Clause requirements







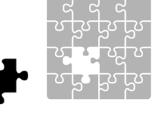






Where should the proceeds of RUC be deposited?

- 18th Amendment restrictions on RUC
- Use or dedication of RUC revenue
- Motor fuel tax bond requirements
- Public understanding and acceptance of the proposed system





When (or on what stages) could RUC take effect?

- Public understanding and acceptance of the proposed system
- Transition strategy vehicles subject to paying RUC
- Motor fuel tax bond requirements
- State IT needs

PRIVACY PROTECTIONS IN A RUC PROGRAM

- Presentation on the topic of privacy protections in RUC systems in WA and elsewhere
- Draft Model Privacy Policy

DATA USED IN RUC SYSTEMS

- o Vehicle registration plate number
- Vehicle identification number (VIN)
- o Name of owner or lessee
- o Access information
 - address
 - email address
 - telephone number
- o Distance traveled data
 - periodic odometer readings
 - metered use data
 - travel pattern data

- o Travel data record
- Billing and payment record
- o Payment information
 - bank account information
 - credit card number
- o Enforcement record



TWO PATHWAYS FOR SOLVING THE PRIVACY QUESTION

- Technological
- Legal



MODEL PRIVACY POLICY: ESSENTIAL PROVISIONS

- Definition of protected information
- Material scope
- Territorial scope
- Responsible agency
- Nature of protection

- Certification
- Consent
- Security
- Remedies
- Rights of RUC payers



RIGHTS OF RUC PAYERS

- Right of access to personal information
- Right to rectification
- Right to erasure
- Right to portability
- Right to object
- Informing RUC payers of the their rights



COMPATIBILITY OF RUC AND TOLLING



INTEROPERABILITY AND COMPATIBILITY

1. Features of interoperability

- Single account through which user can avail of services (e.g., toll payment, RUC payment) from multiple providers (e.g., service providers).
- b) Single device (e.g., tag, plug-in device, mobile phone) for accessing services.
- Background data exchange, communication, payments and reconciliation between providers.

2. Features of compatibility

- a) Broader co-ordination, collaboration and sharing
- b) Lower level of technical integration than interoperability



CRITERIA FOR ASSESSING DEGREES OF COMPATIBILITY

Criterion	Description	
User experience	Ease with which customers can register for, pay, and access services	
Collections reliability	Ability of compatible accounts and services to make collection of tolls and RUC more reliable	
Operational efficiency	Ability of compatible accounts and services to reduce operational costs	
Contractual complexity	Level of complexity of contracts among entities and customers based on compatibility model chosen	
Operational complexity	Levels of operational complexity based on compatibility model chosen	
Governance	Ability of involved entities to manage shared risks, delineate responsibilities, and collaborate for effective oversight, guidance, and control	
Technical complexity	Level of complexity of data exchange and transaction and payment processing	
User perception	Ability of customers to distinguish RUC and tolling and understand any policy differences (e.g., privacy)	
Cost of implementation	Setup costs to achieve desired level of compatibility across systems	



DEGREES OF COMPATIBILITY

Do nothing

- Low risk, easy to implement
- Little benefit to users
- Could postpone compatibility and raise long-term costs

Collaborate

- Open standards and procedures
- Information sharing
- Compatible objectives
- Consistent information and mutuallyinformed customer support

One Bill

- One bill but separate accounts and payment
- Risk of customer confusion and errors
- Could be combined with elements of collaboration

One Account

- Slight variation on one bill
- Single account and registration
- Same customer details for RUC and tolling

One Service

- Payments deducted from same account
- Requires back office reconciliation between RUC and tolling
- More complex
- Integrated service for customers

Regardless of the degree of compatibility sought or achieved, RUC and tolling maintain distinct policy purposes



COLLABORATION VS. ONE SERVICE

Collaboration	One Service	
Co-ordinating activities	Single account provider	
Dealing with customers consistently	Possibility of single device	
Procedures in place for dealing with issues relating to other system – may still need to 'forward calls'	Single registration, payment, customer service	
Common look and feel	Significant value to user	
Sharing lessons learned	Reconciliation of payments	
Collaborating on new initiatives	Detailed agreements and careful oversight	
Sharing some costs	Potential for much broader range of services	



CONCLUSIONS

- 1. Collaboration, at a minimum, provides great benefit with little cost, but demands real commitment
- 2. One service provides the best long-term solution for end users but brings complexity with it
- 3. One bill and one account have some value but could lead to confusion and errors



PRINCIPLES FOR COMPATIBILITY OF RUC AND TOLLING

- Aim above all to improve user understanding through compatibility
- Introduce collaboration at the outset of RUC
- 3. Coordinate activities to provide sense of consistent service
- Establish RUC governance framework with compatibility across other transportation payment systems in mind
- 5. Explore feasibility of using RUC reporting methods for tolling
- 6. Use open architecture to future-proof RUC technology



EFFECT OF 18TH AMENDMENT ON RUC REVENUES

- Information: options if policymakers wish to restrict expenditures to highway purposes
- Question-and-answer

STEERING COMMITTEE INTEREST IN AMENDMENT 18

If the Legislature wishes to eventually replace the gas tax with a per-mile fee (RUC), which characteristics are most important to replicate?

- The state gas tax can only be expended for highway purposes
- Bonds pledging the gas tax are not subject to the state's constitutional debt limit
- Gas tax refunds are provided to, or for the benefit of*, persons using fuel off public highways
- Certain entities and uses are exempt from the gas tax

^{*} Technically speaking, in some instances refunds are provided to program accounts rather than actual persons

REVENUE SOURCES SUBJECT TO AMENDMENT 18

- License fees for motor vehicles (sometimes referred to as "registration fees")
 collected by the State; and
- Excise taxes collected by the State on the sale, distribution or use of motor vehicle fuel (commonly referred to as the state "gas tax");
- All other state revenue intended to be used for highway purposes.

BRIEF HISTORY OF AMENDMENT 18

- Gas taxes were first enacted by states in 1919 (Oregon). Within 10 years, all states had enacted a gas tax.
- Within 20 years, almost all states were using more than 20% of their gas tax revenue to support general government spending. Washington was using gas taxes to provide unemployment benefits during the Great Depression.
- A proposed national highway system (proposed in 1944) called for states to provide matching funds for construction of the federal highways.
- Automobile clubs and concerned citizens ramped up pressure on state legislatures to pass laws preventing diversion of gas taxes for general government spending.
- Washington voters ratified the legislature's proposed Constitutional Amendment 18.

OPTIONS FOR REQUIRING RUC TO BE USED EXCLUSIVELY FOR HIGHWAY PURPOSES

Option 1: Amend Art. II Section 40 of the Washington Constitution to add RUC as a new enumerated revenue subject to expenditure restrictions.

Option 2: Impose RUC in the form of a vehicle license fee.

Option 3: Impose RUC as an "in lieu of" tax, to be imposed instead of the gas tax, with explicit legislative findings and intent that the revenue be used exclusively for highway purposes (i.e., categorical revenue).

Option 4: Impose RUC with explicit legislative findings and intent that the revenue be used exclusively for highway purposes (i.e., categorical revenue).

Option 5: Impose RUC with the directive that the revenue be placed in the motor vehicle fund ("special fund").

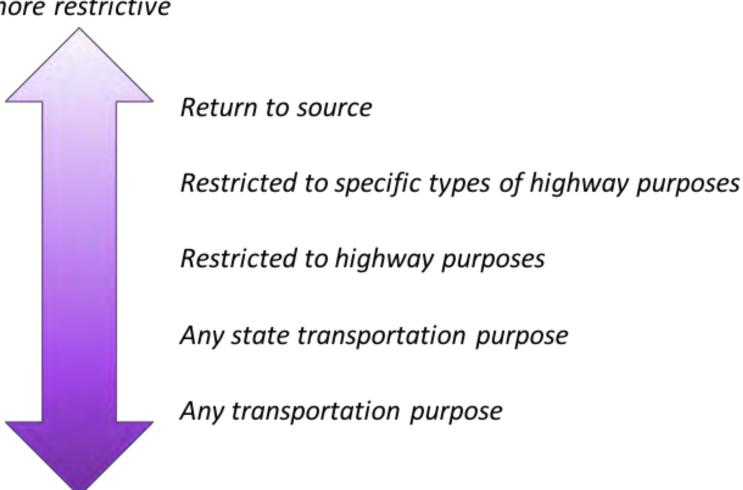
OPTIONS FOR USE OF REVENUE IN A RUC SYSTEM

- Existing sources and uses of transportation revenue
- Alternative theoretical uses of RUC revenue
- Alternatives for existing non-highway gas tax recipients

POLICY OPTIONS FOR ALLOCATING RUC REVENUE

more restrictive

more flexible





NON-HIGHWAY GAS TAX REVENUE RECIPIENTS

Expenditure category of gas tax revenues	Amount (2015- 2017 biennium) (millions)
State highways, bridges, roads, streets	\$2,429
County highways, bridges, roads, streets	\$335
City highways, bridges, roads, streets	\$192
Ferries	\$89
Marine refund	\$18
Nonhighway and off-road vehicle (ORV) accounts	\$18
Snowmobile account	\$2
General fund	\$1
Aeronautics refund	<\$1



ALTERNATIVES

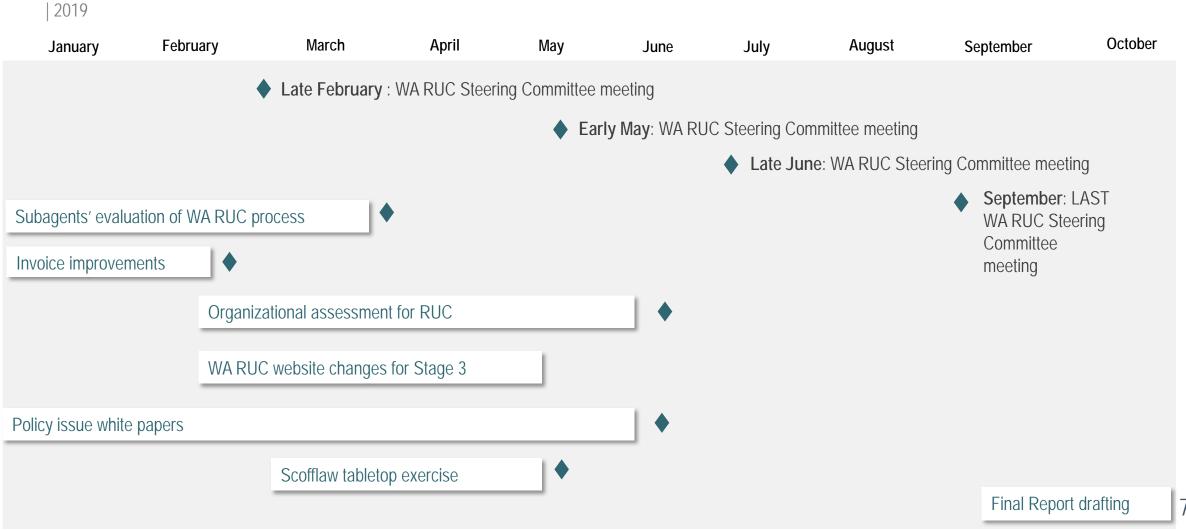
- Under a transition away from gas tax, preserve allocation of gas tax revenue to marine, nonhighway and ORV, snowmobile, and aeronautics uses
- Policy options for RUC revenues:
 - Allocate a portion of RUC revenues to make nonhighway uses whole relative to current allocations
 - Calculate mileage driven off road and allocate RUC revenues accordingly:
 - Seek other funding sources aside from RUC for nonhighway uses



UPCOMING ACTIVITIES

- Preview of Stage 3 activities
- Preview of February 2019 Steering Committee meeting topics

STAGE 3 LOOK AHEAD: EVALUATION AND REPORTING



2019 STEERING COMMITTEE WORK

(Proposed) February 2019 SC meeting

- Motor fuel tax bond requirements
- Legal issue: Interstate Commerce Clause
- Per-mile rate setting process and roles
- Rate setting basis for time-based permit

(Proposed) **April 2019 SC meeting**

- Driver reaction to the proposed RUC system
- Permanent exemptions
- Use of private sector account managers
- State information technology (IT) needs
- Interoperability with other states

(Proposed) June 2019 SC meeting

- Public understanding and acceptance of the proposed system
- Institutional roles in implementing any future RUC system
- Impact on EV adoption
- Transition strategy vehicles subject to paying RUC

(Proposed) Fall 2019 SC meeting

- Discussion of thoroughness and accuracy of the information
- Review and discussion of findings
- Discussion of technical or operational recommendations
- Review of final report outline

FEBRUARY 2019: TOPICS TO BE COVERED

- Updates on real money demonstration between Washington and Oregon
- Preview of the RUC scofflaw table top exercise
- Presentations and Committee deliberation on several policy issues from the "parking lot":
 - motor fuel tax bond requirements and RUC;
 - effects of interstate commerce clause on RUC;
 - per-mile rate setting process and roles;
 - rate-setting basis for a time-based permit.
- Outline of final report and options for potential recommendations

QUESTIONS?

Contact:

JEFF DOYLE

D'Artagnan Consulting

Jeff.Doyle@Dartagnanconsulting.com

